

REMARKS

In the Office Action mailed March 22, 2006, the Examiner noted that claims 1 and 3-13 were pending, and rejected claims 1 and 3-13. Claims 1, 6 and 10 have been amended, new claims 14 and 15 have been added and, thus, in view of the forgoing claims 1 and 3-15 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections are traversed below.

Page 2 of the Office Action rejects claims 1, 3, 6, 7 and 10 under 35 U.S.C. § 103 over Davis and Rohrabough. Page 4 of the Office Action rejects claims 4, 5, 8, 9, 12 and 13 under 35 U.S.C. § 103 over Davis, Rohrabough and Omori.

First, the Examiner asserts (see Action page 2) that Davis extracts "only a display result to be displayed" and points to col. 3, lines 20-37 for support for this assertion. From the discussion in Davis it would be clear to a person of ordinary skill in the art that the entire sample is scanned, this sample is converted into an image "representing the sample", and then this image is transmitted, and that there is no extraction of a portion involved. In this description "a physical sample is digitized by a digitizing device 14" and a digital image information is created ("creating") by an image server 16 from the digitization where the digital image information is "representing a physical sample". That is, the entire sample is represented, not an extracted portion. As discussed therein, Davis is designed to allow a user at a client site remote from a press proof printer shop to inspect a press proof before it is printed to ensure that it is as the client wants it to be so the client can have "ultimate sign off" on what is to be printed. As a result, the entire sample as an image is sent to the client and to do otherwise would destroy the purpose of Davis in allowing the client to have the ultimate sign off on what is being printed.

If the Examiner is interpreting the digitizing of the sample as an extraction process, it is not an image that is being "extracted" by the digitization but rather a physical sample that is being digitized by a digitizing device such that the digitization has yet to be made into an image by the server.

It is submitted that Davis does not extract any portion of an image.

Withdrawal of the rejection for the above-discussed reasons is requested.

Second, in the represented invention a full size, high-resolution image, such as a CAD image, is stored on a server. A user is allowed to designate a portion of the high-resolution image for display on a client display device that does not have the same performance

characteristics as the server (such as lower processing speed, storage capacity or resolution). The image data portion designated by the user is a part of the original high-resolution image that is of interest to the user. The user-designated portion of the original image data is extracted from the high-resolution original image by the server. That is, less than all of the original image data is extracted and sent, improving image transmission speed/efficiency over transmitting the entire image.

The extracted portion is then proportionately changed in size by the server to fit the client device, such as having a lower resolution (coarse-grained data). That is, if the target display is smaller than the extracted portion, the extracted portion is reduced in size to fit the smaller target display. Likewise, if the target display is larger than the extracted portion, the extracted portion is proportionately increased in size. The compressed/expanded image processed by the server is then transmitted to the client device for display. That is, the processing required to extract the portion of the image designated by the user and to compress or expand the portion to fit the client device is performed by the higher performance server and not the lower performance client reducing the load on the client device. This allows users to work with high-resolution images, such as from a CAD system, using lower cost client devices where normally the users would have had to work with the server. This also allows more users to work with the high-resolution images at the same time for the same cost. And overall processing and transmission efficiency is improved compared to a situation where all of the image data is sent, the image data is format converted before being sent, and substantial image processing is performed on the client side for format conversion and processing of the entire original image is performed.

That is, in the present invention original image data is sent not requiring a format change to a different format (such as to a vector format), only a portion of the original image data is sent rather than the entire image and the processing for extracting and resizing to fit the client display device is done by the server rather than by the client device.

The Examiner acknowledges that Davis does not teach all of the features of claims 1, 6 and 10 and uses Rohrabough to allegedly supply the missing teaching, in particular the display region vertical-to-horizontal length ratios and corner coordinate rounding calculations for a designated display area.

Rohrabough discusses to a system with a server that converts a web page display into a vector based graphics list display where the image is in a vector format. This vector list is passed to a client. That is, the entire original image is transmitted to the client in a different

format. The client then processes the list to provide a display of the entire original image. In this process the entire original display is passed to the client in the form of the vector list ("The vector format enables the client to substantially retain an original page... ." - paragraph 0010). In the Rohrbaugh client, the user can then pan and zoom the image as desired so that any processing to fit a portion of the original image on the display of the client device is performed on the client device.

The combination of Davis and Rohrbaugh would have an entire image sent to the client in a different format and have the client do the processing for that entire image.

In contrast, the present invention has a server that extracts data from the original that is to be displayed and transmits the extracted portion ("a server ... extracting only a display result to be displayed on the client display device as display data from the original image data ... transmitting the display data to the client display device." - claim 1). In further contrast, it is the server, not the client, that does the processing to fit the extracted portion to the client display (a server ... determining a display region with vertical-to-horizontal length ratios and corner coordinate rounding calculations for a designated display area of the client display device" - claim 1). Independent claims 6 and 10 emphasize similar distinctions. Davis and Rohrbaugh, together or alone, do not teach or suggest such. Omori adds nothing to Davis and Rohrbaugh with respect to the features discussed above.

The present invention improves transmission efficiency by transmitting only the portion to desired to be displayed making more efficient use of network transmission capacity and improves processing efficiency and utilization of processing resources by having the server do the processing as compared to the prior art.

Withdrawal of the rejection for the above-discussed additional reasons is also requested.

Third, based on the interpretation of the teachings of the art by the Examiner, there is also no motivation to combine Davis with Rohrbaugh and, even if they could be combined, the combination would destroy the purpose of Rohrbaugh and of Davis. As interpreted by the Examiner Davis involves "extracting only a display result to be displayed". However, it is the intention of Rohrbaugh to provide the client with substantially the original page as noted above so no extracted image portion (such as extracted by Davis) would be expected to be received by Rohrbaugh. The purpose of having the substantial original in Rohrbaugh would be destroyed by the extraction alleged for Davis. Rohrbaugh allows the user to display the entire image by panning or zoom in on a part of interest. As a result, there is no need to do an extraction as in Davis when Rohrbaugh panning is being used for display. Any part of interest

could be found by panning and examined at a desired level of detail by zooming. A person of skill in the art would not be motivated to do extraction as in Davis when Rohrbaugh is involved. Further, when only the display result to be displayed is extracted as is alleged for Davis, there is no need for a pan capability as is a required feature of Rohrbaugh. The pan feature in Rohrbaugh would be useless, destroying this purpose in Rohrbaugh. Additionally, since what is of interest has been extracted by Davis (according to the Examiners interpretation), the zooming feature of Rohrbaugh would also be useless since what is of interest is shown.

For these further reasons, withdrawal of the rejection is requested.

It is submitted that the inventions of the independent claims distinguishes over the prior art and withdrawal of the rejection is requested.

The dependent claims depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by the prior art. For example, claim 3 calls for the display data that is extracted and transmitted to be "visually recognizable data from the original image data". In contrast, in the combination proposed by the Examiner the data would be vector data that is transmitted to the vector data processing scheme in the client of Rohrbaugh. Vector data is not a type of data that would be visually recognizable as original image data as vector data images are images that are completely described using mathematical definitions (see <http://www.prepressure.com/image/bitmapvector.htm>). It is submitted that the dependent claims are independently patentable over the prior art.

New claims 14 and 15 emphasize allowing a user to designate a portion of an image stored by a server, the extraction of that portion by the server and the transmitting of the designated portion to the client for display. Claim 15 further emphasizes that resizing of the image is performed by the server before the designated and resized portion is transmitted. Nothing in the prior art teaches or suggests such. It is submitted that these new claims, which are different and not narrower than prior filed claims, distinguishes over the prior art for the reasons discussed above.

It is submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

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